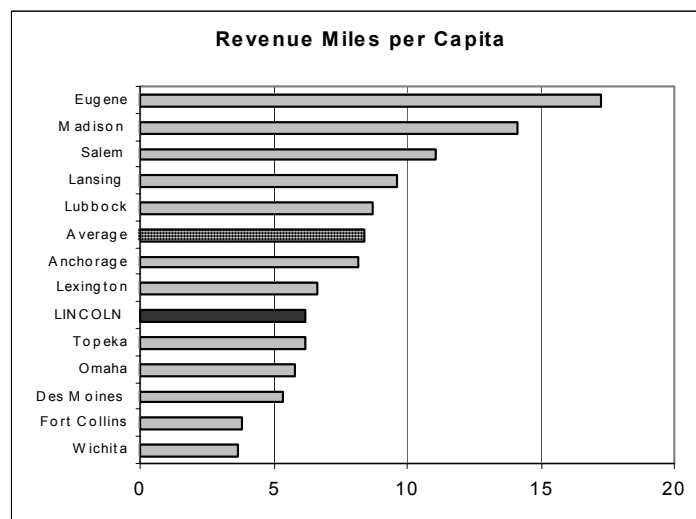


The Role of Transit in Becoming the Community's Second Car

In order to attain a future vision whereby multi-modal components are able to function as the second car, all modal services would need to expand significantly for most households within the community as well as become a significant option for the University community. Transit services in particular will need to operate during more hours of the day and more frequently during the day. As fixed route services expand, operational and capital expenses will increase such as expansion of the Americans with Disabilities Act (ADA) paratransit related services, the size of the bus and paratransit van fleet, and even the size of the bus garage.

Establishing a target for how much service to provide depends on how high the community wishes to aim for increasing its transit mode share. A reasonable target might be somewhere between the average of the peer cities, as reported in the Analysis of Conditions and Trends, and the highest transit use peer cities of Eugene and Madison.

We can establish a target in several ways. First, we can use simple measures such as revenue miles of service per capita to gauge potential service levels. Based on this measure, we would expect that Lincoln would need to increase service by a minimum of 35% to attain the average level of its peers, and well beyond 100% to reach comparable levels with Eugene and Madison. A reasonable target might be Salem, Oregon which provides about 80% more daily service miles per capita than does Lincoln.



Another way to look at how much additional service should be provided to attain the vision is to base the decision on the span and frequency of service. Lincoln currently operates most fixed route services from around 6:00 a.m. until about 7:00 p.m., Monday through Friday, and from 6:30 a.m. through 7:00 p.m. on Saturdays. On weekdays, peak period frequencies are generally around 30 minutes on the better performing routes and around 60 minutes during off-peak periods. In Salem, weekday and Saturday service runs until 10:00 p.m. and many routes have peak frequencies of 15 minutes and off-peak frequencies of

30 minutes. Extending service hours Friday and Saturday until 1:00 a.m. for the Downtown/Haymarket area to and from the University is an option to expand service as well.

It is understood that expansion of service will have to take place over an extended period of time. An initial target might be to expand service on the highest performing routes first and perhaps make route and schedule adjustments for the remaining routes. The net increase in revenue hours resulting from expanding to a later service day and doubling the service frequency on the highest performing routes would be on the order of a 70-80% increase. There would also need to be expansion of the ADA service in order for paratransit service levels to remain comparable to fixed-route service levels. Also, as a growing community at 1.5% population growth per year on average, additional expansion of fleet size and service coverage will be needed to maintain the targeted level of service for the community. A possible horizon year target to “ramp-up” to the new level of service might be 15 years, a time frame that will allow a reasonable and steady increase in operating costs and capital costs.

As a result, if Lincoln sets its target as Salem, Oregon for determining desired service levels, the expected increase in service is around 80% above current fixed route levels. This would include an 80% increase for capital funding and approximately a 64% increase in overall operational funding (some operational costs are fixed and therefore a full 80% increase is not necessary). For ADA paratransit service, the increase would probably need to be in the range of 20%. Along with service level increases, the fleet and support systems would also need to increase by proportionate amounts. Currently, the StarTran operational budget is approximately \$7.5 million per year, and the capital budget averages \$1.826 million per year. Any increase in funding will be based on these current funding amounts. If Lincoln chooses a different target level for its vision, the services and systems will need to be adjusted accordingly. Keep in mind that with a growing population over a 15 year period, a proportionate additional expansion of service will be needed to meet the needs of the new population. Based on an average annual growth rate of 1.5%, this equates to an additional 25% increase in service to meet the needs of the expanding population.

The following is a listing of capital costs and operational costs that will be used to establish 15 year increases in StarTran service levels that provides an 80% level of service increase to compare with Salem, Oregon’s level of service, and a 25% increase in service to match the projected 15 year population growth. This listing of projects and expansion ideas is not intended to be exhaustive or final. It is only representative at this time. These costs figures also do not take into account inflation that could nearly double the cost of these items by the end of the 15 year period.

- Operational cost to add 1 bus or paratransit van to fleet: \$110,000 (annual cost)
- Capital cost to purchase 1 new full-size bus: \$260,000
- Capital cost to purchase 1 new paratransit van: \$155,000
- Capital cost to build a new bus garage to serve expanded fleet: \$4 million
- Capital cost to place bike racks on all 56 existing buses: \$112,000 (\$2,000 per bus)
- Capital cost to build a multi-modal center in Downtown: \$4 million

An 80% increase in transit service in Lincoln's transit system over a 15 year ramp-up period, along with a coinciding 25% increase in service resulting from expansion of the population over the 15 years will result in annual increases in both operational costs and capital costs. The chart attached to this report indicates a steady annual increase over 15 years in StarTran's operational budget and capital budget. An annual increase of \$550,000 in the operating budget is expected each of the 15 years. This increase covers the addition to the StarTran fleet each of the 15 years of either 5 full-size buses, or 4 full-size buses and 1 paratransit van. At a cost of \$110,000 per year in operating cost for each fleet addition, this amounts to a compounding annual operating increase of \$550,000 each of the 15 years.

Coinciding with this increase in operational costs is an annual increase in capital costs to purchase new buses and vans, along with the capital costs of placing bike racks on each existing bus, building a new bus garage to handle the expanding fleet size, and building a multi-modal center in Downtown Lincoln. The increase in fleet size would amount to an increase in full-size buses by 70, expanding the fleet from 56 to 126 by the end of the 15 year period. The paratransit van fleet, or Handi-Vans, would increase by 5 vans, expanding from 9 today to 14 by the end of the 15 year period. Combined, these additional capital costs would result in an average annual increase in capital funds over the current StarTran annual capital budget by \$1.8 million throughout the 15 year period.

Much of this increase in capital costs could be covered from aggressive pursuit of federal funds that would be matched with local funds. Normally this local match equates to 20% of the total project cost. However, on the operational side of the budget, the additional \$550,000 each year would most likely need to come from local sources as federal funds are not normally available for operational expenses.

At the end of this 15 year period that will ramp-up Lincoln's level of transit service by 80% as well as increase service by an additional 25% to match the projected growth of the city over this time, the replacement cycle for the buses and vans purchased as part of this ramp-up will need to begin and continue into the future. This means the increased capital costs for purchasing the 70 new buses and 5 new vans will need to remain in the capital budget to ensure adequate replacement of the fleet. Also, with a continuation of the projected population growth over time, additional buses and vans will need to be added to the fleet and system to maintain the higher level of service with an expanding population.

This increase in funding for both operational and capital budgets, and the resulting increase in service levels, is indicative of the need to make transit in Lincoln a highly desirable benefit for its residents. As part of this effort, it will be necessary to raise the acceptance level of this mode of transportation by, for example, having major employers such as the City/County government, State government, the University, and other private companies play active roles in travel demand management programs that might include such efforts as paying part of the direct cost of transit use for their employees. Also, using disincentives to automobile use such as increased parking costs in the Downtown and not expanding the Downtown parking supply will help transit ridership keep pace or increase with service expansion over the 15 year period.

A number of multi-modal concepts that have been discussed as part of the Multi-Modal Transportation Plan process have not been costed and included in this 15 year cost projection at this time. Some of them are as follows:

- Bus Rapid Transit and Bus Lanes
- Signal Preemption
- Bus Turnouts
- Advanced Traveler Information Services
- Expanded Transit Marketing

This does not mean this 15 year projection is a preferred option, is final in any way, or that other concepts will not continue to be studied and included in the final plan. The 15 year projection simply is intended at this time to indicate what an 80% increase in service in a growing metropolitan area may require as far as additional funding is concerned. Also, implementation of items such as Automatic Vehicle Location (AVL) and Farebox Card Reader technologies are currently planned and included in future StarTran budgets and therefore will not require additional funding to implement in the future.

It also must be pointed out that over an extended period of time, land use and urban design efforts will be needed to bring Lincoln into a more multi-modal friendly era. In addition, new administrative and management efforts will be needed to most effectively implement a multi-modal effort.

Parks and Recreation Trails Program

A parallel increase in funding for the City's trails program would also be needed to truly move Lincoln toward a multi-modal future. The current trails program from the Parks and Recreation Department constructs on average 1.5 miles of new trails on the trail system each year. Much of this trail building program in the City's current Capital Improvement Program is currently concentrated on the Antelope Valley trails projects.

On average it costs \$355,000 to construct a mile of 12 foot wide trail on the trail system. Thus with an average of 1.5 miles of trail constructed each year, the City on average budgets \$545,000 each year for trail construction, with much of this capital cost covered by federal funds and private donations. City General Fund expenditures each year for such construction is \$90,000. Approximately \$125,000 of General Revenue funding is budgeted each year for general maintenance of the trail system, and only \$10,000 per year of General Revenue is budgeted for trail rehabilitation and replacement, a budget need that is estimated to be closer to \$100,000 per year. These budget line items comprise the average annual trails budget of \$680,000, of which \$225,000 is funded through the General Fund.

	<u>Current Trails Budget:</u>
New Trail Construction:	\$545,000
	\$330,000 federal
	\$125,000 private
	\$90,000 public
General Maintenance:	\$125,000
Trail Replacement:	<u>\$ 10,000</u>
Total City Cost:	\$225,000
TOTAL ANNUAL FUNDING:	\$680,000

If an 80% funding increase is provided for the trails program, the annual average trails building and maintenance budget would increase from \$680,000 to \$1,224,000, which amounts to an annual increase in funding of \$544,000. Such an increase would allow the Parks and Recreation Department to increase its trail construction funding to build an additional 1 mile of trail each year for a total of 2.5 miles annually. It is assumed that federal funds and/or private donations would still be available to cover the majority of the trail construction costs as is the case today. There is no guarantee that additional federal funds will be available to fund the additional 1 mile of trail construction each year. If federal funds are not secured, additional local funding would have to become available or increased trail construction would not occur.

The regular maintenance program could be significantly increased compared to today's program so that a very high level of maintenance could be attained along the trail system, and with the increasing size of the trail system, this budget item will have to increase along with the size of the trail system. Also, an effective trails rehabilitation and replacement program could be truly implemented with increased funding. It should be noted that most, if not all, of the increases in the maintenance, rehabilitation, and replacement programs would have to come from local funding sources.

	<u>Proposed Trails Budget</u>
New Trail Construction:	\$900,000
	\$614,000 federal
	\$125,000 private
	\$161,000 public
General Maintenance:	\$199,000
Trail Replacement:	<u>\$125,000</u>
Total City Cost:	\$485,000
TOTAL ANNUAL FUNDING:	\$1,224,000

It is important to point out here that the Public Works Department also constructs multi-use trails along some arterial roads when the road is constructed and where the Comprehensive Plan's Trails & Bicycle Facilities map indicates. Also, the concepts of instituting a bicycle and pedestrian education program and expanding the bicycle and pedestrian signage program are concepts (among others) that have not been included in this cost study, but they may be included in the final Multi-Modal Plan and play a role in future pedestrian and trails planning efforts in Lincoln.

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